

# Epitomes

## Important Advances in Clinical Medicine

### Plastic Surgery

*The Scientific Board of the California Medical Association presents the following inventory of items of progress in plastic surgery. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist busy practitioners, students, research workers or scholars to stay abreast of these items of progress in plastic surgery that have recently achieved a substantial degree of authoritative acceptance, whether in their own field of special interest or another.*

*The items of progress listed below were selected by the Advisory Panel to the Section on Plastic Surgery of the California Medical Association and the summaries were prepared under its direction.*

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#### Breast Reconstruction

RECONSTRUCTION of the breast following mastectomy is becoming more common as women become more aware of surgical alternatives and as newer techniques develop. Even women with significant chest wall deformities due to radical mastectomy and radiation therapy are candidates for breast reconstruction unless other systemic disease precludes an elective surgical procedure. The type of reconstruction is contingent on the degree of chest wall deformity. Each operation must be designed for the individual patient and with the objective of obtaining symmetry.

For suitable candidates, some centers are now enthusiastic about immediate breast reconstruction using an expandable submuscular prosthesis placed at the time of mastectomy and slowly inflated. Later, after appropriate skin expansion, the prosthesis is removed and replaced with a permanent implant followed by nipple-areola reconstruction. In selected cases the implant may be placed without the use of an expander.

When the pectoralis muscles have been removed and the overlying skin is tight and scarred, additional skin and muscle are needed to create the most symmetric reconstruction. The latissimus dorsi musculocutaneous flap is an excellent choice in this situation and can produce predictably reliable results when placed over a gel-filled implant. There is considerable enthusiasm regarding a lower transverse abdominal flap based on the rectus abdominis muscle, which allows for successful breast reconstruction using autogenous tissue and avoids the need for an implant. The donor site incision usually closes similarly to that of an abdominoplasty and results in a tighter and trimmer abdominal wall and a soft and symmetric reconstructed breast.

After an adequate breast mound has been created, one can reconstruct the nipple-areola complex using a variety of tissues. In the usual reconstructive procedure the pigmented skin on the medial aspect of the thigh is used for the areola, and a shared portion of the opposite nipple or earlobe is used to reconstruct the nipple.

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#### REFERENCES

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Hartrampf CR, Scheffan M, Black PW: Breast reconstruction with a transverse abdominal island flap. *Plast Reconstr Surg* 1982 Feb; 69:216-225  
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#### Limb Salvage

LIMB SALVAGE, now a well-recognized technical feat, must be measured against the useful function restored and that which can be provided by a prosthesis. In the upper extremity restoration of sensate key pinch, chuck pinch and tubular grasp are the primary objectives, in that order. In the lower extremity restoration of functional gait with a sensate foot is the sole objective. Lower extremity length is of prime importance, but a useful upper extremity may be many centimeters shorter than a normal one. High amputations should only be replanted under the most ideal conditions in the arm and almost never in the lower extremity. Protective sensation on the sole of the foot and useful sensation on the hand will take up to two years or more to develop. It may never occur if there has been a traction injury to the proximal nerves, plexes or nerve roots.